

UPCOMING EVENTS REMINDER - All dates are tentative

pending park staffing and rainfall amounts. As the dates get finalized I will email them to all members. You can also get information by calling the parks Four Rivers Sector at (209) 826-1197.

Path of the Padres Hikes – reservations begin in January and hikes begin late February or early March

Annual Wildflower Day at Pacheco State Park – usually around April 1st

Wildflower Hikes at Pacheco State Park – weekends in April (except Easter) There may be two hikes available each Saturday of April, one a 2 mile round-trip easy hike and another longer and more strenuous, anywhere from 4 to 7.5 miles as decided by the group.

Kids Fishing and Fun Day at San Luis Creek – May

Kite Day at Pacheco State Park - June

Great Valley Grasslands vernal pools – now through March for waterfowl, mid-April through the end of May for wildflowers.

USFWS Arena Plains Wildflower Tour — usually early April (209) 826-3508 for more information

Springtime wildflowers begin to bloom in February

Bird watching in our area is great year around. The winter months are a great time to see all the waterfowl. Great Valley Grasslands, US Fish and Wildlife Service lands, and State Wildlife Areas, Los Banos Creek, and O'Neill Forebay are all good places to view them. For migrating warblers and other songbirds the Basalt Campground, San Luis Creek picnic area, Pacheco State Park, and our river parks as well as nearby USFWS areas are good bets.

Four Rivers Association Annual Members Meeting has been set for February 9, 2013. FRA Director and retired ranger David Milam will be giving a short presentation on wildlife of the nearby foothills followed by an outdoor birdwatching activity led by FRA Director John Fulton. A potluck lunch will also occur. A more formal invitation will be sent when all the details are finalized. All members are encouraged to attend. Hope to see you there!

Our last mystery item was the "Tunnel Monument" sign and accompanying U. S. Dept. of the Interior Bench Mark (sometimes called a "Monument"). They are found beside the Spikes Peak

Trail/Road about 1.5 miles from the parking lot:





If you look closely at the center of the Bench Mark you will see the word "TUNNEL" and above that are the overlapping letters "C" and "L". The overlapping C & L are shorthand for CenterLine. This monument is placed exactly above the center line of the Pacheco Tunnel, part of the San Felipe Project that brings water from the San Luis Reservoir to the Santa Clara and San Benito Counties. The Pacheco Tunnel intake is in the bottom of San Luis Reservoir. Water is taken in through a 9.5 ft. diameter tunnel which connects to the Pacheco Pumping Plant which can be seen just south of the Dinosaur Point area. Here the water is raised 309 ft. by twelve 2,000 hp pumps into a 50 ft. diameter regulating tank which holds over 3,000,000

gallons of water. From here the water contines through the Pacheco Tunnel which totals 7.1 miles through the hills. Upon exiting the tunnel the water continues another 7.92 miles through the Pacheco Conduit (pipe) and then it splits into two other conduits, one going north and one going south. This system provides water for agricultural and urban uses. If you would like more information you can Google "San Felipe Project"

The Mighty Oak

by John Fulton

In tribute to Robert "Bob" Edminster, here are a few reflections on Valley Oaks (*Quercus lobata*), the species that he helped me to understand a little better. Well, in an effort to promote full disclosure, Bob taught me almost everything I know about Valley Oaks. I was lucky that he volunteered to lead nature walks for resource agencies and that I was able to attend some of them that went to areas of Valley Oak woodland. He also took me under his tutelage and showed me how to raise oaks from acorns in numbers that allowed for several people around Merced County to get first-hand experience with starting oaks from seedlings. Here are a few observations I have made that may be of general interest to those other graduates of the Edminster School of Oaks who were recipients of seedlings.

There are years that produce many acorns. There are years that produce few acorns. Most years, that I have looked, there have been no acorns. Some years, there are some trees that produce many acorns while other trees produce few or none.

Once acorns are found and collected for propagation, you have to decide whether to plant them immediately or to store them for later. Viability and germination success for those planted immediately seems to be fine. Storage can cause dormancy; breaking dormancy must be done correctly to ensure good success. Storage in a refrigerator can postpone germination for several weeks. Freezing temperatures will kill the embryo in the acorn. Once the radical appears on a few of the acorns the others should be placed into damp peat moss outside. Acorns with a radical emerging should be planted into a 4"X4"X12" deep-tube of potting mix with the bottom open. The open bottom will temporarily air prune the tap root, or keep the tap root in a ready state for rapid growth when the seedling is put into the ground at its future permanent location during the first year of growth (or two at most). Planting the acorn into the planting tubes is difficult if the radicle is more than a couple of inches long. Damaging the radical will prevent the tap root from growing normally. Transplanting after the oak has been in the ground is very difficult because it is difficult to dig up the tree without damaging the tap root. One oak that was transplanted by me when it was 5 years old and 6 feet tall had a tap

root that was still over an inch in diameter at a depth of more than 4 feet where I cut it rather than digging further down. Nearby oaks planted at the same time but not transplanted are now 20 feet tall and 6-8 inches in diameter at breast height (dbh). The transplanted tree stopped growing for 3 years. It has grown to be about 8 feet tall today and 3 inches dbh, compared to the size at transplanting of 6 feet high and 2 inches dbh.

As I travel around Merced County today I see a new generation of Valley Oaks and am reminded of the influence of Bob Edminster. As a young man he used Valley Oak seedlings and saplings as teaching tools in his science classes to show the development of tap roots. He was active for years in Los Banos as the donor of trees for Arbor Day programs and donated oaks for habitat restoration of refuges and parks. Steve Klett, Yvette Donovan, Mary Stokes and others also come to mind as I see the various restoration projects that have put trees back into the landscape around the county, but it is Bob Edminster that created generations of advocates for trees as well as being so involved in the actual growing of seedling oaks. He nurtured those oaks from acorns into mature trees, and he nurtured so many of us who now follow the same path as we enjoy the benefits of shade, beauty, and knowledge from the seeds he planted over the past decades.

Editors note-when I was the ranger at Pacheco State Park it was Bob who showed me how to collect the acorns, prepare them for planting, sprout the acorns, and how to care for the seedlings. All of the young oak trees (as well as the young buckeye trees) that are along the entrance road and parking lot at Pacheco State Park are a direct result of Bob's teaching.

Three views of our next mystery item









I prefer winter and fall, when you feel the bone structure of the land-scape--the loneliness of it--the dead feeling of winter. Something waits beneath it--the whole story doesn't show.

-Andrew Wyeth, American artist

TARANTULAS

Have you ever seen those big, hairy spiders walking down the roads and trails in our nearby foothills?

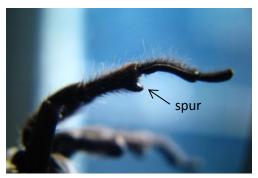
Actually, they are male tarantulas (well, almost all of them are males). What they are doing is looking for females. Many people mistakenly think the tarantulas are migrating. But in reality they are serious about their mating. Females generally live for several years once they reach adulthood, but males live only three or four months after maturity.

The spiders' development takes a period of seven to nine years and during this time they live in burrows in the ground, such as ground squirrel burrows or old gopher burrows. Food, in most cases, comes to them. They don't have to search it out.

It is usually from September through November and sometimes into December as the days shorten, that mature male tarantulas strike out from their burrows to secure a mate before they die. Often dozens of them can be seen along a short stretch of roadway or trail.

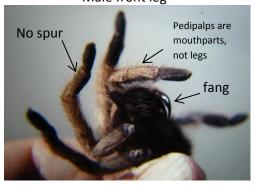
It is an old tale that tarantulas are good indicators in predicting the first major storm of the season. In fact, if there is a storm approaching, they might not leave their holes.

So when you see these fascinating spiders walking down the road or hillside, they are just out seeking companionship.



Male tarantulas have "spurs" on their front two legs that assist them when they lift the females for mating. Tarantulas normally do not bite people, but they do have an impressive pair of fangs that could be used if they chose to do so. Their venom is about as toxic to us as a honey bee sting. One of their other defensive tactics is to "throw" some of their long hairs off of their abdomen at any predators, which are irritating to the predator's eyes.





Female

When looking at tarantulas as well as all other spiders, remember that they have four pair of legs. If you see what looks like another pair near their head these are actually pedipalps, which are leg-like mouthparts that are mostly used to manipulate their food while eating.